



# YOUR METALWORKING FLUID SOLUTIONS FOR SOLUTIONS

## OAKFLO<sup>®</sup> DSS 706-AFC

SEMI-SYNTHETIC, METALWORKING FLUID CONCENTRATE

### APPLICATIONS

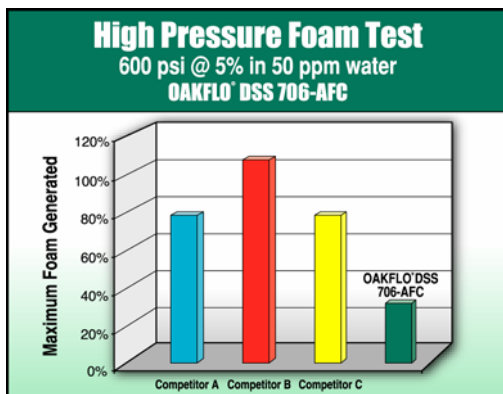
**OAKFLO<sup>®</sup> DSS 706-AFC** is a premium semi-synthetic that contains a chlorinated EP lubricant for heavy-duty operations providing the performance capabilities of soluble oils. It is recommended for high fluid pressure and high volume flow applications where minimization of foam is critical for part quality and machine operations. It is recommended for general-purpose machining of ferrous and non-ferrous metals. Can be used for turning, reaming, drilling, tapping and milling.

**Metals:** Cast Iron, Nodular Iron, Malleable Iron, Gray Iron, Carbon Steels, Cast Steels, High Speed Steels, High Alloy Steels, Tool Steels, Stainless Steels, and most Aluminum Alloys

**Duty Range:** For moderate to heavy-duty operations

### FEATURES & BENEFITS

**OAK SIGNATURE<sup>®</sup> AFC Fluids** provide "Advanced Foam Control" through the combination of product design, raw material selection and innovative antifoam technology. These fluids are the result of years of experience that have identified creative methods to prevent, control and reduce foam, even when fluids are used in high pressure delivery systems including through the tool systems. This expertise is only available in **OAK SIGNATURE<sup>®</sup> - AFC Fluids**.



**LUBRICITY** – A combination of lubricants provide good machining properties – Keeps parts and tools cool

**EXCELLENT RANCIDITY CONTROL** – Contains a patented microbial control package for biostable performance

**EXCELLENT FERROUS CORROSION CONTROL** – Rust inhibitor package is extremely effective in preventing in-process rust on machines and parts – Also very effective on cast/malleable/gray and nodular iron

**NON-FERROUS CORROSION CONTROL** – Contains non-ferrous corrosion inhibitors

**OPERATOR FRIENDLY** – Mild to skin – Easy to mix – Pleasant odor

**GENERAL-PURPOSE PRODUCT** – Can be used economically throughout the shop on moderate to heavy-duty operations

**OPERATOR FRIENDLY** – Easy to maintain and control – Waste treatable using standard fluid treatment procedures systems – Can be recycled for reuse

**RECOMMENDED STARTING DILUTIONS** **FOR INDUSTRIAL USE ONLY**  
Recommended Starting Dilution: 5% (1:20)  
Typical Operating Range: 5% (1:20) to 10% (1:10)  
For concentrations outside this range contact OAK® Technical Service at 513-458-8199.

OAKFLO® DSS 706-AFC is to be mixed with water for use (add concentrate to water).

Add no other substances to the concentrate mix unless approved by OAK® Technical Services. Not recommended for use with magnesium or alloyed magnesium.

For concentration analysis, use the MI Titration Procedure, Non-Solvent Titration Procedure, Total Alkalinity Titration Procedure, OAKCHEK™ Test Strip, or Refractometer.

**TYPICAL PHYSICAL AND CHEMICAL PROPERTIES**  
**Physical state:** Liquid  
**Appearance and odor:** Clear/Chemical  
**Colors available:** Undyed  
**Solubility in water:** 100% Miscible  
**Weight, lb/gal, 60° F (15.6° C):** 8.7  
**Specific gravity, H<sub>2</sub>O = 1):** 1.04  
**Boiling point, °F (°C):** 212 (100)  
**Flash point, COC, °F (°C):** None, Self Extinguishing  
**Fire point COC, °F (°C):** NA  
**Freezing point, °F (°C):** 26 (-3)  
If frozen, thaw completely at room temperature prior to use.  
**pH, concentrate:** 9.7  
**pH, 5.0% mix, typical operating conditions:** 8.8  
**Total chlorine/chloride, wt%, calculated:** 3.2/< 50ppm  
**Total sulfur, wt%, calculated:** 0.26  
**Triazine:** None  
**Dicyclohexylamine:** None

**PACKAGING** Available in 5-gallon pails, 55-gallon drums, and bulk containers.

**REFRACTOMETER FACTOR = 1.6** Multiply the scale reading obtained on your OAK® Metalworking Fluid or other acceptable refractometer by the **Refractometer Factor** to obtain the mix concentration in percent.  
**NOTE: Calibrate the refractometer so that it reads 0.0 with water, before testing the sample mix. Remove gross contaminants from the sample mix before testing.**

For additional information concerning OAKFLO® DSS 706-AFC, refer to its OSHA MSDS or contact OAK® Technical Services at 1-513-458-8199. Reprints/Updates of this Product Information Flyer (PIF) can be found on our web site, [WWW.OAKINTERNATIONAL.COM](http://WWW.OAKINTERNATIONAL.COM) or from your OAK® representative.

Minor formulation changes or normal variations in the manufacture of this product may cause slight variations in the data presented on this sheet.  
Consumable Products Division/Milacron Marketing Company  
Cincinnati, Ohio 45209

ISO Certified Company  
9001/14001

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